R E P O R T R E S U M E S

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MEMORANDUM ON--FACILITIES FOR EARLY CHILDHOOD EDUCATION.
BY- DEUTSCH, MARTIN AND OTHERS
EDUCATIONAL FACILITIES LABS. INC., NEW YORK, N.Y.
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DESCRIPTORS- *EARLY CHILDHOOD EDUCATION, *DISADVANTAGED YOUTH, *EDUCATIONAL FACILITIES, ENVIRONMENTAL INFLUENCES, SPACE UTILIZATION, SELF CONCEPT, PERCEPTUAL DEVELOPMENT, INTELLECTUAL DEVELOPMENT, CLASSROOM ENVIRONMENT, CLASSROOM ARRANGEMENT, EDUCATIONAL EQUIPMENT, NURSERY SCHOOLS, GUIDELINES, *EDUCATIONAL SPECIFICATIONS, EDUCATIONAL NEEDS, GREELY, COLORADO, HARLEM P.S. 175,

BECAUSE LEARNING ENVIRONMENT HAS SIGNIFICANCE FOR THE DISADVANTAGED CHILD, INSTRUCTIONAL SPACE SHOULD BE PROVIDED THAT WILL FACILITATE INTELLECTUAL DEVELOPMENT. GUIDELINES ARE GIVEN FOR GENERAL AREA, BLOCK ALCOVE, MANIPULATIVE TOY AREA, READING AND LISTENING AREA, DOLL AND HOUSEKEEPING AREA, ART AREA, TUTORING BOOTH, CUBICLES, TOILETS, STORAGE, OUTDOOR PLAY AREA, AND OBSERVATION SPACE. THE SQUARE FOOTAGE, CONTENTS, PURPOSES, AND ADAPTABILITY OF THESE ELEMENTS ARE GIVEN IN DETAIL. THE AIM IS TO ACHIEVE AN ENVIRONMENT THAT FOSTERS THE EDUCATIONAL OBJECTIVES OF THE PROGRAM CONTAINED WITHIN THE SPACE. THREE EXAMPLES OF EXISTING FACILITIES ARE DESCRIBED TO ILLUSTRATE THE GUIDELINES' APPLICATION TO RENOVATING A HOUSE, REMODELING A PUBLIC SCHOOL CLASSROOM, AND DESIGNING A NEW EARLY CHILDHOOD EDUCATION CENTER. (FLOOR PLANS AND BIBLIOGRAPHY ARE INCLUDED.) (LG)

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MEMORANDUM ON:

Facilities for Early Childhood Education

PS 000275

Prepared For:

Educational Facilities Laboratories
477 Madison Avenue
New York, New York 10022

Prepared by:

Martin Deutsch, Director
Institute for Developmental Studies
New York Medical College

Richard R. Ellis, Supervisory Coordinator
Institute for Developmental Studies
New York Medical College

Glendon P. Nimnicht, Director
Experimental Program in Teacher Education
Colorado State College, Greeley, Colorado

Angela M. Covert, Research and Personnel Coordinator
Institute for Developmental Studies
New York Medical College

Architectural Drawings by Ronald W. Haase

The facilities described in this report are for the nursery school education of the environmentally disadvantaged child.* They would be appropriate for any good nursery school, but they have particular relevance for the disadvantaged child because he tends to enter school lacking in development of skills basic to school learning. Factors contributing to disadvantage are many, varied, and complex. Among such factors are the child's economic and social environment, his familial and peer relationships, and his own view (or concept) of himself. He may fail to develop his aural, visual, tactile, verbal, and conceptual abilities.

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* Although they are referred to as nursery schoolrooms throughout this report, a kindergarten room could be laid out in the same way.

Environmental factors can operate effectively to facilitate or inhibit intellectual development. One of the most crucial elements here is the actual physical environment. Not only does the physical environment provide stimuli, but it also governs to a large extent the way in which stimuli are presented.

A full discussion of factors determining the needs unique to the disadvantaged child and to the psychology of learning, implied pedagogical strategies, and explicit curriculum would be beyond the focus of this report. Recommendations contained in this report, however, are based upon just such a discussion. Amplification of these initial observations is provided in the references at the end of this booklet.

Not only is it clear that environment affects learning, but considerable evidence indicates that the early years represent the most crucial period for perceptual and intellectual development. Schools traditionally have begun their work with children at a time after much important development has or should have taken place. Indeed, current information suggests that the time to attempt to overcome developmental deficiencies is before first grade. Educational programs designed expressly to overcome deficiencies and conducted in facilitating environments by specially

trained personnel are key elements to successful programs. Curriculum for the so-called disadvantaged child is conceived as following a developmental sequence progressing from the more simple to the more complex.

The elements of the classroom environment and their arrangement can determine how the children spend much of their time. The value to the child of the time spent in the classroom is strongly related to the arrangement of the classroom. Although the need for order and beauty in educational buildings has often been stressed, their relationship to learning is too rarely mentioned. In nursery or kindergarten schoolrooms for disadvantaged children, order and beauty are definitely related to learning.

GENERAL REQUIREMENTS

Typically, the nursery class consists of 15 to 20 children, 1 teacher, and 1 assistant teacher. For this we recommend a minimum of 700 square feet of instructional space, excluding observation and office area. One thousand square feet would be optimal. This discussion focuses on a classroom for a single group, but, through creative planning, a nursery classroom of unconventional shape could be designed to accommodate two or

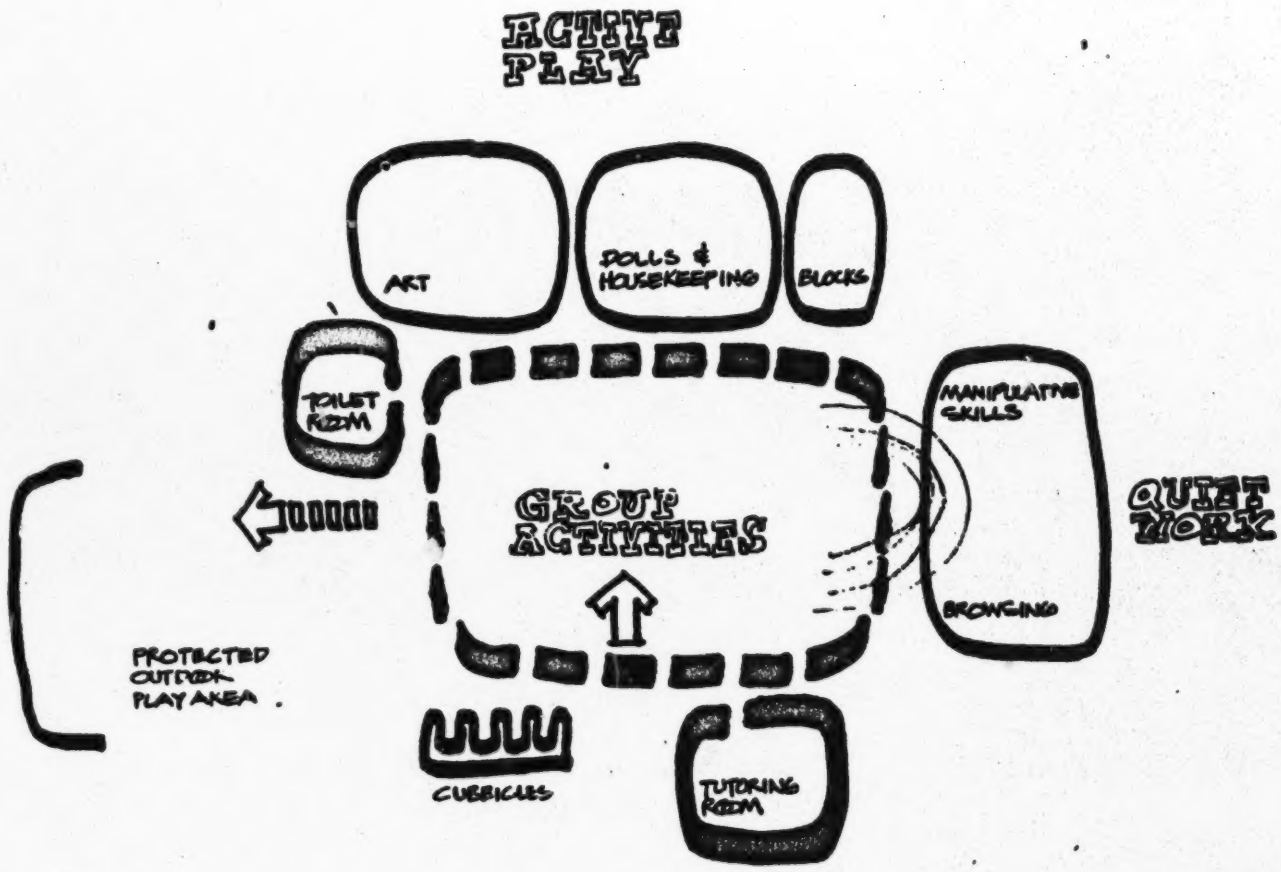
three nursery class groups (30 to 60 children).

The classroom environment should foster a climate conducive to the educational objectives of the program. For example, children may have difficulty learning to be relatively quiet and attentive in a noisy environment or sitting in uncomfortable positions. Children may be inhibited in the development of self-reliance if the environment forces the teacher to supervise their every move.

The classroom's arrangement should contribute to the child's concepts of order and space. A perceptually clear and distinct room environment, achieved through uncluttered equipment and furniture arranged in an orderly fashion, helps the child focus his attention on the curriculum instead of distracting him with irrelevant stimuli. Daily contact with an uncluttered, structurally simple environment helps to teach time and space organization. Tidiness is a secondary benefit.

The nursery classroom should consist of a series of well-defined, interrelated areas, including a general area for group activities, a reading corner, a doll corner and housekeeping area, an area for blocks and another for manipulative toys, an art corner, and storage cubicles where the children hang their hats

and coats and keep their possessions. Rest rooms and storage areas are also essential. A separate tutoring booth is desirable because it provides a special environment for individualization of instruction and for teacher-child interaction.



The smaller the total space available, the more careful must be the selection of what to include. Regardless of the room's size, it is imperative to maintain neatness, orderliness, and general attractiveness, with adequate space around objects and

areas in the room. Empty space around objects is necessary: when a child's attention is directed to a group of rubber animals, for example, he must be able to see them unobscured by adjacent objects.

Teachers who have taught only in square or rectangular rooms seem to prefer large, open spaces which make visual supervision of an entire room possible from any vantage point. If more than one adult is in the room at all times, there is less need for such supervision. Furthermore, a rectangle of 1,000 square feet has some disadvantages. Such a room appears extremely large to small children. It makes it difficult to create corners for reading and other quiet activities. And it almost eliminates the possibility for a child to be alone with an adult.

The New Nursery School at Greeley, Colorado (see Figure 5, page 32) is compelled (by the fact that it is located in a converted single-family house) to occupy three rooms - a large L-shaped room, a smaller room, and a separate porch for the children's storage cubicles. The arrangement has proven very satisfactory.

A rectangular room is by no means ideal, and, if it is necessary to use one, it should be broken down into specific areas with freestanding dividers and cabinets.

Acoustical control is a fundamental concern in designing nursery schoolrooms. Children's voices are high-pitched, and many activities, both noisy and quiet, take place at the same time. Because disadvantaged children need special help in discriminating sounds, the classroom itself should be as free as possible of acoustical distractions.

A carpeted floor is recommended for acoustic purposes and for its other advantages. It is attractive, is easy to maintain, and provides a warm, comfortable surface on which the children work and play. Using carpets of different colors and textures helps to define different areas of the school. Only the art corner, because it is cleaned with water, requires a hard surface.

The size of the children must be kept in mind in planning display areas. Any display higher than 4 feet 6 inches is beyond the small child's usual range of awareness. Most children can select their own books or puzzles if the top shelves are not higher than 3 feet 6 inches.

In planning the number and placement of windows, consideration ought to be given to the view outside the window. Where the school setting affords a pleasant, changing view, windows might be included as integral parts of the classroom. Windows should

be low enough for the children to see through. When windows would expose only the monotony of a brick wall, the space traditionally given them might better be used as space for classroom displays. In the second case, skylights and translucent wall materials are effective ways of providing natural light in the classroom without losing valuable wall space.

THE GENERAL AREA FOR GROUP ACTIVITIES

As already mentioned, a nursery schoolroom comprises a general area and several specific corners or alcoves for special activities. The general area should be an open space of at least 150 square feet for group activities like singing, dancing, and listening to a story.

It is frequently advisable to seat all the children and adults around tables. The same tables can be used in the art area, the reading area, or the manipulative toy area, so long as they can be pulled together easily in the larger area for group activities.

Music activities can take place in the general area. Carts are needed here for a record player and a tape recorder, and closed shelving for items such as rhythm instruments, autoharp, guitar, and drums.

The general area should have a central place containing shelves for displays that change every few days. The display shelf should be about 4 feet long, with a bulletin board above it and one shelf below. The shelf should be 15 to 20 inches high to accommodate small animal cages, canned vegetables, and the like. A sliding bulletin board over a fixed one would allow various displays to be exposed or covered at the teacher's will.

Where there is no opportunity to grow things out of doors, a planter for raising flowers, plants, or vegetables is essential. Other useful equipment in the general area would include a hot plate and a refrigerator.

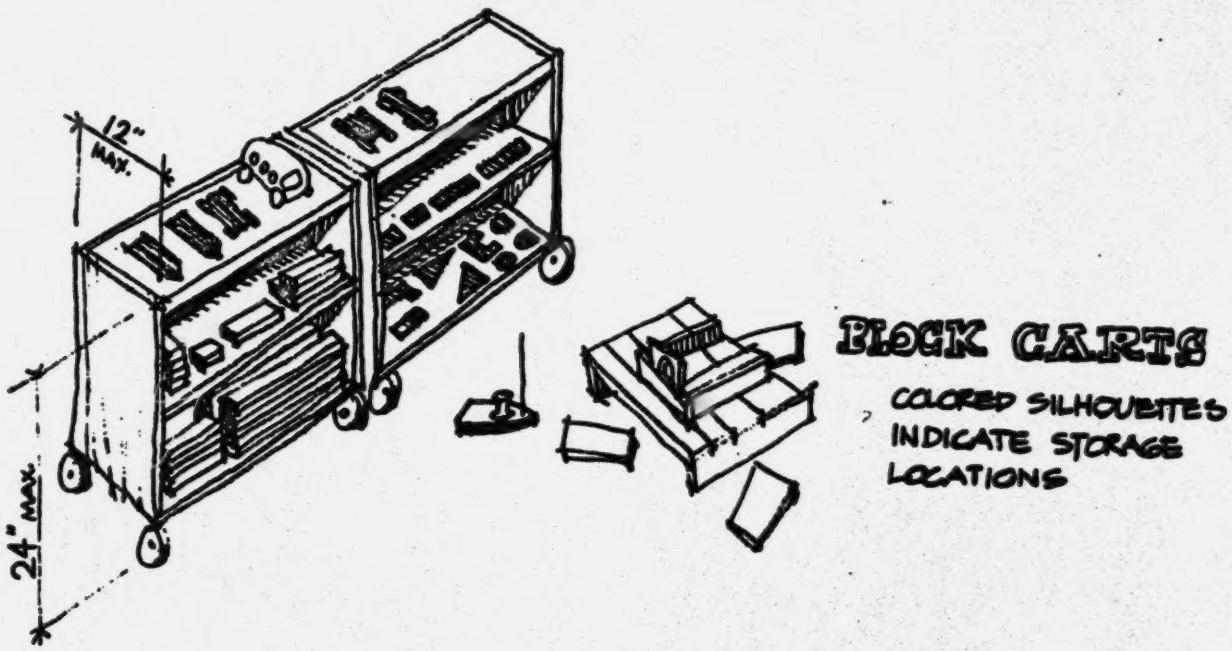
THE BLOCK AREA

Blocks provide a wide variety of learning opportunities. These opportunities include development of self-expression, muscular coordination, and cognitive skills. Building structures that are shared with and admired by peers and teachers helps the child view himself positively.

The block area could be a little alcove (24 to 30 square feet) outside of the major traffic area but opening onto the general area. This arrangement creates a protected space where children

can build something that won't be inadvertently knocked down by children engaged in other activities, and also provides the necessary space for several children to play with the blocks simultaneously.

Unpainted, rectangular unit blocks, uniform in height and width but varying in length, are used, along with blocks of various shapes - triangular, curved, and so on. Blocks of the same shape and length are stored in separate stacks with enough space between the stacks to make them easy to arrange. The lengths of the blocks, which vary, are exposed rather than the ends, which do not vary. Silhouettes painted on the shelves help the children to find and replace the blocks by themselves.



At the beginning of the year, 16 linear feet of shelving, at least 11 inches deep and having at least 10 inches between shelves, is adequate. As the school year progresses, more blocks are added. These may be shelved in movable cabinets that can be rolled into the classroom when needed, and then left in the room. If the storage shelves for the blocks are no higher than 2 feet, small items, such as toy trains, cars, planes, boats, animals, and figures of people, can be displayed on cabinet tops, their places marked by painted silhouettes.

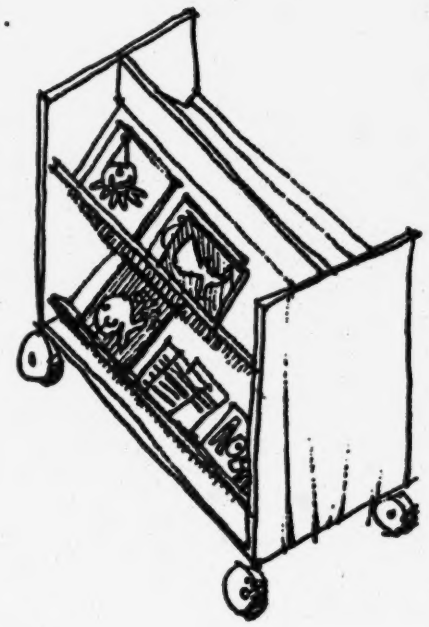
MANIPULATIVE TOY AREA

Play with manipulative toys complements and enhances some of what children learn when playing with the blocks. By playing with colored pegs and pegboards, lockboards, small unit blocks, Cuisenaire rods, puzzles, felt boards and geometric forms, nuts and bolts, nesting cups, and similar toys, children can learn colors and develop perceptions of size and form as well as of mathematical concepts.

The manipulative toy area is basically a quiet area where children work individually. It can be by itself or part of the area for reading and listening. Two or three two-shelf, open

cabinets are sufficient to display the manipulative toys. Puzzles are best displayed on sloping shelves so the children can see them all as they select the ones they want to use. A cabinet above the manipulative toy area is a good place to store toys and puzzles not currently in use; the number and complexity of toys and puzzles is increased as the year progresses. A table that can accommodate at least four or five children should be located near the display cabinets.

SLOPING SHELVES
FOR DISPLAY OF
BOOKS & PUZZLES



READING AND LISTENING AREA

Children will come, individually or together, to the reading and listening area to look at books, to be read to by the assistant or the teacher, or to listen to a story on a tape recorder. These activities are probably more important for disadvantaged children

than for children from more advantaged homes. The typical home of the disadvantaged child might not have available sufficient kinds and quantities of children's reading material, and there will probably not be a quiet, uncrowded place for the child to learn to listen.

The reading and listening area should be a quiet place well away from the block area, art area, and housekeeping corner. The space should be well defined either by walls and dividers, by cabinets, or by a difference in ceiling height, floor elevation, lighting, or color and texture of floor or walls. This area could be elevated two or three steps above the general area, an arrangement that would convey a feeling of its being special, separate, and cozy. If elevated, it can also serve as a platform for dramatic activity, and the children can sit on the steps when they are being read to.

The reading corner requires sufficient display shelf space for showing the front cover of each of 20 to 25 books. The highest shelf should be no more than 3 feet 6 inches from the floor - preferably 3 feet only. If the shelving cannot be adjusted, there should be at least 14 inches between the two shelves. Thirty-two linear feet of shelving provides enough space for books.

There should be a place to display one book and related small objects and pictures. An adjacent bulletin board adds to the display.

In addition to the book shelves and display area, it is highly desirable to have a low shelf or table, available to as many as six children at a time, on which to place specialized learning equipment such as a cartridge tape recorder.

DOLL AND HOUSEKEEPING AREA

The doll and housekeeping area requires a dress-up area, dolls and necessary accessories, cooking and eating utensils, and general housekeeping equipment. Some authorities feel that as the year progresses, the housekeeping area should be increased, while other authorities would gradually eliminate the area completely.

The doll and housekeeping area is the area most children will first turn to when they come to nursery school. It is a link to the home, and at the same time it provides the opportunity for expanding the child's concept of what a home can be. Some disadvantaged children are unfamiliar with many things that teachers assume are standard equipment or practices in any home. Some families, for instance, may not have organized meals when everyone

sits down together to eat. Instead, family members eat at different times and not necessarily at a table.

The housekeeping area might present a major problem - it can be so attractive to children that some of them will want to spend most of their time there. It is for this reason that some authorities would begin the year with a complete housekeeping corner and gradually eliminate it. Presumably, as the area is decreased, children will either move into other areas of the room, or, if they remain in the housekeeping area, become more creative in their play.

The dress-up area is usually of great interest to the children. It should include a child-size chest of drawers and either hatboxes or open shelves for dress-up clothing (shoes, hats, jewelry, material suitable for belts, trains, capes, veils), a full-length mirror, and a telephone connected to another telephone elsewhere in the room. One telephone should be placed so that the child can look into the mirror while talking. The second telephone need not be fully enclosed, but neither should the child be able to see or hear (except through the receiver) the one to whom he is talking.

Dolls and the necessary accessories also provide important opportunities for learning. Through their own explorations and

through interactions with the teacher, children learn textures, the names and functions of objects, colors, manipulative skills, and the routines of their own daily living - dressing, eating, going to bed, and the like.

The cooking area requires a child's stove and refrigerator, cooking utensils, other equipment such as plastic fruits and vegetables, and a container for juice or milk. There could also be a sink, open shelves, and a pegboard. The shelves would hold table flatware, as well as many of the other utensils found in the average kitchen. There should be enough space between objects to present an orderly appearance, and the pegboard should have silhouettes of each object, to encourage the children to return each item to its place. A child-size table and chairs complete the cooking area.

Finally, the housekeeping area should include places for a child-size ironing board, iron, clotheslines, mop, dustpan, and broom.

ART AREA

In the art area, a few children at a time paint pictures, make finger paintings, collages, and mobiles, or play with clay, modeling compound, paste, crayons, marking pens, and an assortment of other

material such as soda straws and pipe cleaners.

The art area should be away from heavy room traffic and should have limited access. It requires a sink for washing hands and cleaning paint brushes and sponges. Ideally, there would be two sinks - one at the appropriate height for the teacher and a lower one for the children. If only one can be provided, it should be at the appropriate height for the children's use.

Two kinds of storage space in the art area are desirable.

In the first, sheets of newsprint (usually 18 inches by 24 inches) and of colored construction paper should be stored within easy reach of the children. Construction paper should be arranged so that a child can take one color without disturbing the other stacks. The teacher might also store crayons, marking pens, and paint brushes here.

The second storage space, for such things as scissors and paints, should be closed and out of the reach of the children. The storage cabinets can also serve as room dividers.

The art area should have space enough for two or more children to paint at one time. A regular easel with room for painting on either side is satisfactory; or three or four easels side by side could be provided by sloping a long piece of plywood or masonite

out from a wall or room divider. The latter arrangement has the virtue of providing more work area in less space, and it allows the young painters to admire each other's work. Easels should be easy to clean, and the tray that holds the paints and brushes should be removable for cleaning.

A table is important in this area. It should be large enough to accommodate four children playing with clay, using finger paints, or pasting collages. The table should be about 18 inches high and have a work area of 15 square feet or more.

Art activities provide a feeling of accomplishment and recognition that helps a child feel positive about himself, which is especially important for disadvantaged children. One of the ways to reinforce this is to display the child's paintings, but to dislay all the children's paintings simultaneously destroys the clarity and attractiveness of the room. If, somewhere in the room, at child's eye level, a display space is provided for five or six 18- by 24-inch pictures, and if the pictures are frequently changed, each child can see his work exhibited many times during a year. It is not necessary to display all the children's art work at once.

Provisions should be made for hanging paintings to dry. There should be enough space for at least 12 paintings to dry at one time.

TUTORING BOOTH

It is essential that an enclosed space be provided for teaching one child at a time. The enclosed space, or tutoring booth, enables a child to be free of distractions while working with a teacher or with specialized teaching equipment. This space might also serve as a testing area, or simply as a place where a child can be alone with an adult. These activities are important and such a space should be provided even if, as a consequence, the size of the main room is reduced.

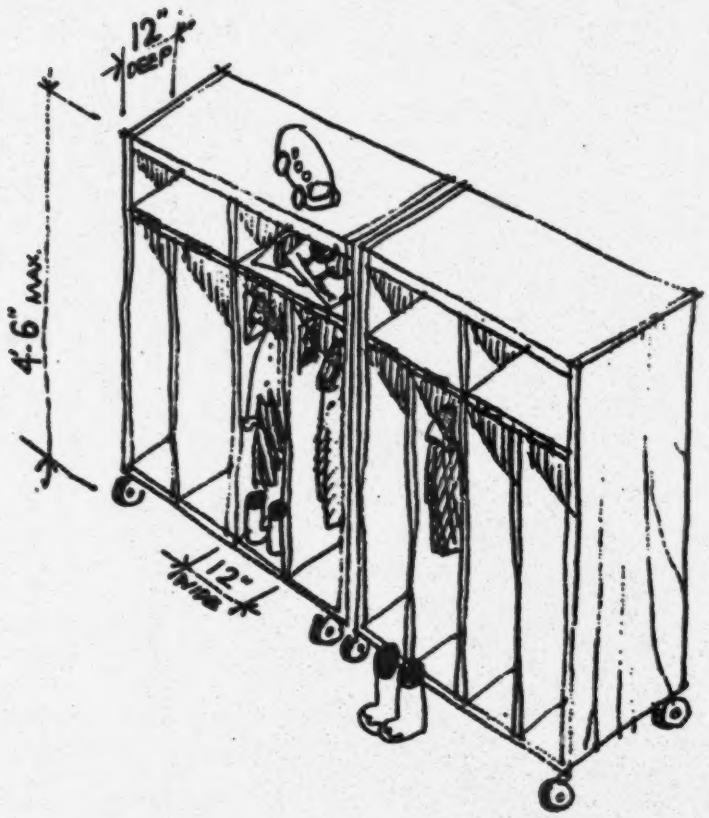
In some instances, it might be feasible to create a room within a room by enclosing an area large enough to accommodate a small group of five or six who could work away from the distractions of the rest of the class. If only one teacher is to be present in the class, the walls should be transparent to allow the teacher visual control.

INDIVIDUAL CUBICLES FOR STORAGE

Each child should have a place of his own in which to hang his hat and coat, set his rubbers or overshoes, and store things that belong to him. These cubicles, or cubbies, should be about 1 foot deep, 1 foot wide, and 4 feet 6 inches high. The child

should be able to sit down in or near his cubicle to put on his shoes.

INDIVIDUAL CUBICLES



TOILETS

Where rest rooms for the children are not adjacent to the classroom, inordinate time is wasted in moving children to and from the rest room. If rest rooms are integral parts of the classroom, children can use them independently and develop self-reliance.

The theory that the fixtures should resemble those in the

children's homes has merit, but the overriding considerations are convenience and utility. The wash basin and toilets should be appropriately sized for children.

STORAGE SPACE

To insure an orderly and neat room and reduce the number of stimuli present at any one time, storage space outside the classroom is important. It can also serve as a utility area for the teacher and should contain a large sink for preparation of paints and for cleaning up.

If a sink is provided here for the teacher, only one sink, placed between the art and housekeeping areas, is necessary in the classroom. The hot plate used in the classroom and a refrigerator for keeping milk and juice belong in the outside storage room if possible.

OUTDOOR PLAY AREA

The outdoor play area could include a planting area, a sandbox, an open area for play with balls, hoops, inner tubes, boxes, and boards. Ideally, some part of this area would be sheltered to allow the children to spend some time outdoors during inclement

weather.

A storage space is needed for the outdoor equipment.

OBSERVATION SPACE

In any nursery school that is to serve as a demonstration center, observers should be able to see and hear without being seen or heard. Even if the school is not a demonstration center, an observation area is desirable for programs that encourage parents to observe classes and to become more involved with the school and the education of the child. A combination of one-way glass, microphones, and earphones will insure separation of pupils and observers; one-way glass with a louvered panel would suffice.

Ideally, the observation area should be 1 or 2 feet higher than the regular classroom. That would give the observer a good view over the low room dividers and would leave the wall space below the observation windows free for cabinet and display space.

An alternative to an observation room is a closed-circuit television setup that provides viewing at a location removed from the classroom.

Acoustical control in the classroom is essential. Without this control it is virtually impossible to hear or to transmit the

speech of the children. Sound-absorbing ceiling and wall tile, draperies, and carpet all merit consideration for inclusion in the classroom.

The observation area should open directly on the corridor or outside, allowing observers to come and go without interfering with the children and the teachers.

A SUMMARY OF SPACE REQUIREMENTS

Activity	Space (In Square Feet) Min.	Opt.	Storage	Display	Other
GENERAL AREA	150	200	Carts, closed shelves for music equipment	2 centrally located shelves 4' long, 15-20" apart; bulletin board	Planter; hot plate and refrigerator (or in additional storage, below); tables (can be tables from other areas if easily movable)
BLOCK ALCOVE	50 (can be 24-30 if play can expand to general area)	75	Shelving 16' long, 11" deep, at least 10" high, plus supplementary shelving in movable cabinets to be added through school year		
MANIPULATIVE TOY AREA	100	150	2 or 3 two-shelf open cabinets; sloping shelves for puzzles; cabinet for toys not in use	Open and sloping shelves (see Storage, left)	Table for 4-5 children; should be quiet area
READING AND LISTENING AREA	(combined with manipulative toy area)		Closed case for duplicate books out of children's reach	32' of low, open shelving for 20-25 books showing front covers; shelf and bulletin board for special exhibits	Table or low shelf for tape recorder, accommodating up to 6 children

DOLL AND HOUSE-KEEPING AREA	100 (possibly increased or decreased progressively)	150 to be	Drawers and open shelving for dress-up clothes; dolls; open shelves and peg-board in cooking area		Full-length mirror; 2 telephones; sink (can be shared with art); table and chairs in cooking area
ART AREA	100	150	Open shelves for news-print and construction paper; shelves accessible only to teacher for paints, scissors	Sufficient to hang 6 18x24 inch paintings	Easels; sinks (one for children-may be shared with housekeeping area; one for teachers-may be in additional storage area); table 18" high with area of 15 sq. ft; space for paintings to dry
TUTORING BOOTH(S)	45 (each)	50 (each)			Enclosed for privacy; if only one teacher is available partitions should be glass
CUBICLES	60	90	For pupils' clothes and other belongings; should be 4½' high, 1' wide, 1' deep		
TOILETS	40	50			
ADDITIONAL STORAGE	30	100	Refrigerator, hot plate (see General Area, above)		May serve as teacher's utility area
TOTAL	675	1015			
OUTDOOR PLAY AREA					
OBSERVATION SPACE	Can be combined with additional storage area				

THREE EXAMPLES OF FACILITIES

The New Nursery School in Greeley, Colorado, occupies a converted house, and for the most part it provides the minimum amount of space for each activity. The exceptions are two tutoring booths, office and work area, and ample storage area.

As one can see in the floor plan (Figure 5), the main room has been formed by combining a living room, dining room, and bedroom into a single L-shaped room. The arrangement has proven to be very satisfactory. The L shape, with partial walls and an archway dividing the L, breaks the space down to a pleasant scale. It also creates a natural quiet area in the smaller part for a reading-manipulative toy area. The block corner is outside of the main traffic area, yet there is ample space for block play to expand into the general area. The art area is also outside of the mainstream of traffic, but it is too small. The display shelf is the focal point of the room; it is opposite the children's entrance door and adjacent to the door leading to the rest room and tutoring booths.

An outside porch has been enclosed for the cubicles and for the storage of outdoor equipment.

The most restricted area in the room is the dress-up and doll

area - a housekeeping area does not really exist. Many of the learning experiences that are associated with the housekeeping area are provided by bringing in additional equipment at various times.

There is a portable hot plate and a refrigerator in the office (a former kitchen). The children are served milk and cookies on the table in the art area.

The two tutoring booths are used for teaching, for experimenting, for testing, and for individual use of specialized equipment.

The observation areas are satisfactory: adults enter at the back of the building, and cross-traffic between children and adults is eliminated except in the corridor outside the booths and rest rooms. If the adults remain in the observation areas while the children are using this corridor, the arrangement works very well.

A fenced-in play area provides open space for games and other activities and for a garden plot, some flowers, and a large sandbox.

The Institute for Developmental Studies, at New York Medical College, conducts an experimental pre-kindergarten project at a relatively new elementary school, P.S. 175, in central Harlem (see site plan, Figure 6). Classrooms originally designed for kindergarten use have been given over to the nursery project. Figure 7

is a plan of the four kindergarten rooms and an adjacent play area, showing the existing layout and suggested modifications to adapt both interior space and outdoor play facilities for pre-kindergarten programs.

The classroom space would be enlarged by moving the window wall out to the edge of an existing overhang, providing additional space to the rear for tutoring and observation booths. The new area for reading and manipulative play is three steps up from the main room and set apart to be quiet and more intimate. The carpeted steps provide a place for the children to sit and work with puzzles and picture books or to gather during story time. The raised area can also serve as a stage.

As an alternative to remodeling the kindergarten wing at P.S. 175 for nursery use, a second proposal is shown in Figure 8. This scheme would provide a separate pavilion designed especially for nursery school children and located on the existing school playground.

This proposal would accomplish several objectives. First, the now evicted kindergarteners could be returned to their original classrooms and outdoor play space (they are presently using conven-

tional primary grade classrooms on the school's second floor). Second, a demonstration center for preschool programs would be provided in an environment particularly suited to their needs. The outdoor play space lost could be reclaimed by acquiring a vacant lot adjacent to the present playgrounds.

The circular nursery pavilion is designed for 30 to 40 pupils with a teaching staff of 6, at least 2 of whom would be experienced in early childhood education, others being part-time or intern assistants.

In this open, carpeted space, various activity areas could be defined simply by rolling storage units about. The step-tiered arena could serve as a gathering place for stories, games, and plays. The art and science alcove near the arena is a "wet" area for painting supplies and cleanup. Science activities could be conducted in the arena and art projects set up at the adjacent work tables.

Upstairs is an observation mezzanine which could do double duty as a sleeping, dining, or play area. Around the entire perimeter of the circle would be a window ledge for sitting, napping, playing, etc. Storage would be located below the window ledge (see Figures 9 and 10). Low masonry walls outside the pavilion define

the nursery children's play area and separate the children from older pupils.

In both Figures 7 and 8, a minimum of furniture and equipment is shown built in. Wheeled storage units with interchangeable inserts are proposed so that the various activity areas they define could expand or change as the children's needs change. Figures 9 and 10 give an indication of the arrangements possible within the fluid, open space of the proposed nursery pavilion.

THE CHALLENGE OF TEMPORARY QUARTERS

We have described guidelines for developing a learning environment for early childhood enrichment. The suggestions and recommendations included have evolved from research and demonstration programs that have explored and are continuing to explore the nature of early childhood education. Hopefully, these guidelines will be applicable in a variety of situations or spaces.

With the increased national concern for preschool programs as one part of the War on Poverty, the number of preschool or nursery classes is growing tremendously. It would be naive to assume that these classes will all occur in specially designed space. It is only realistic to recognize that these educational facilities often

will be put in existing structures. In our discussion, we have given examples of a renovated house, a remodeled public school classroom, and a specially designed early childhood education center.

One example of facilities to which we have not addressed ourselves, and one that is frequently used for a makeshift nursery classroom, is the corner of the church basement or gymnasium. Frequently, spaces cannot be altered permanently; they will be used for a nursery class during the day and basketball games or dances on weekends. Since makeshift facilities will inevitably be used, the challenge lies in attempting to apply our guidelines to difficult situations.

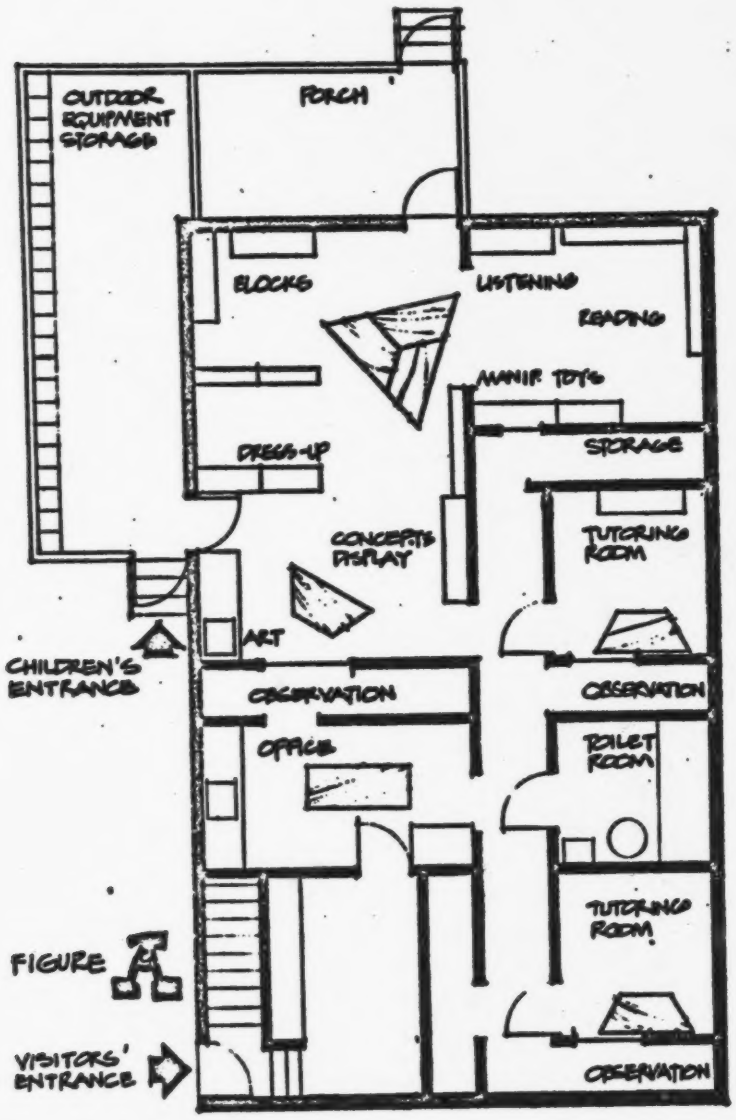


Figure 5

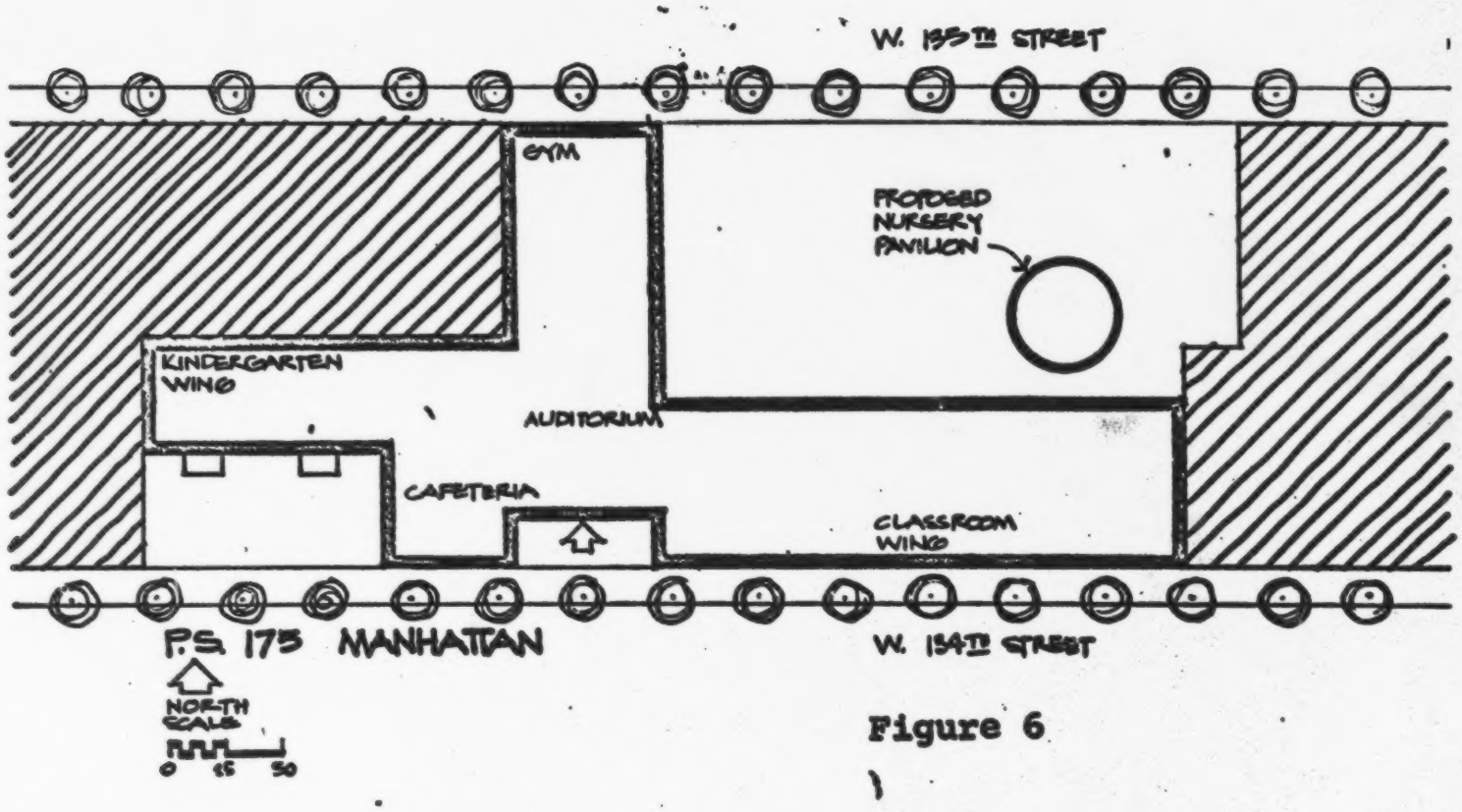
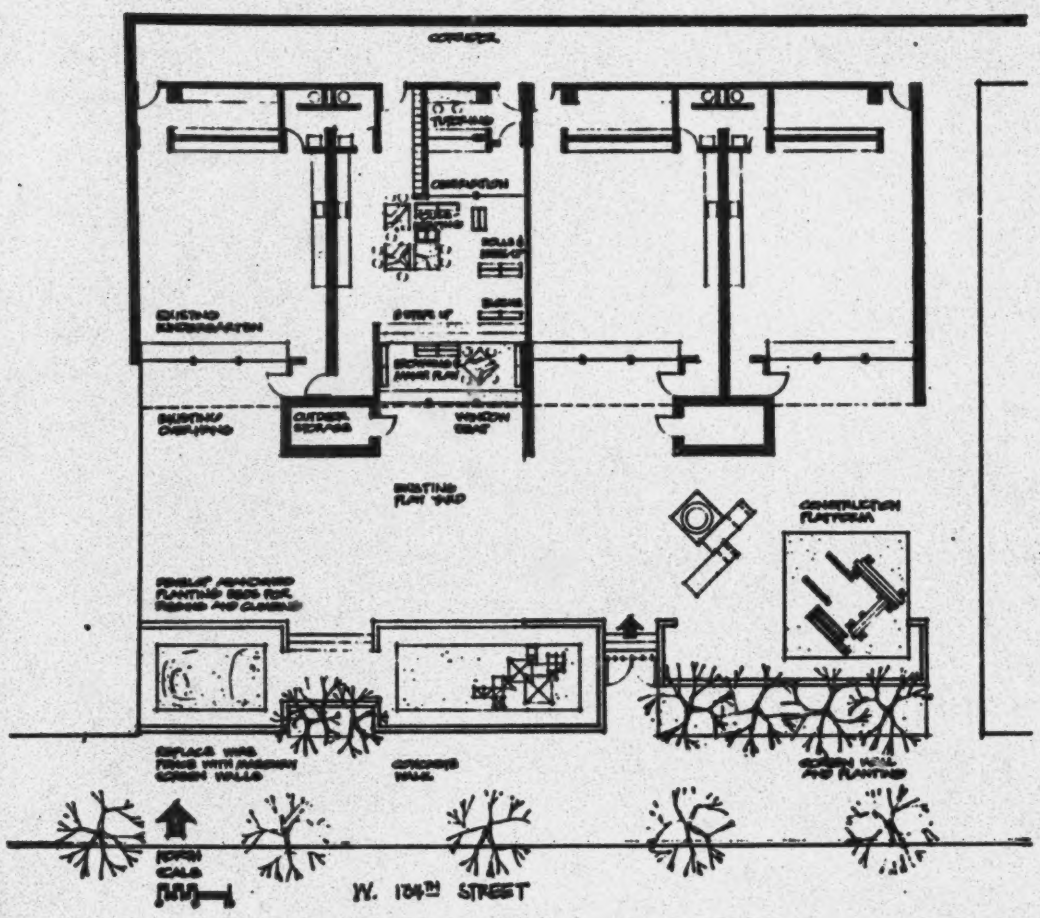


Figure 6



PROPOSED NURSERY.

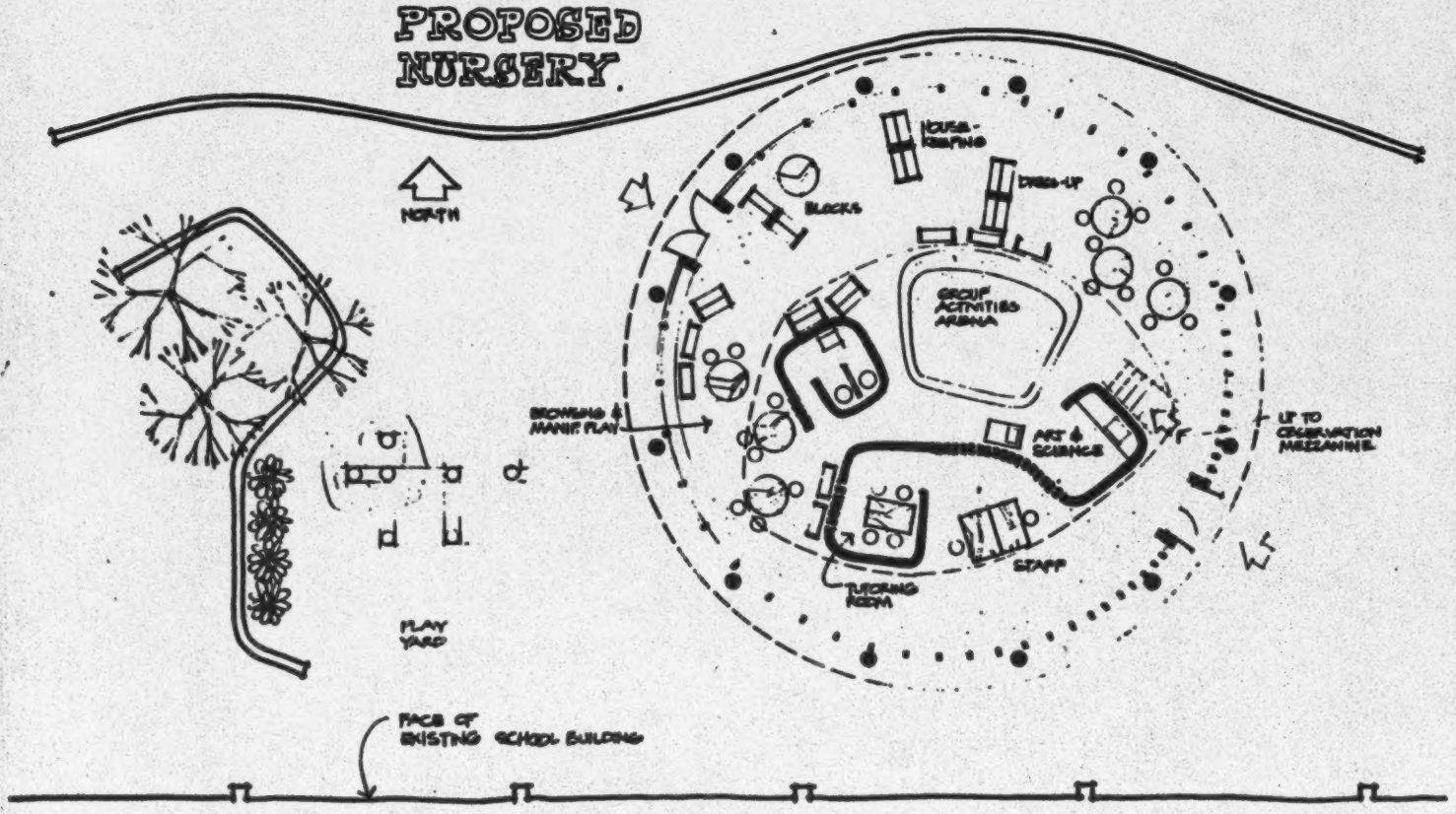


Figure 8

Figure 7

Figure 9

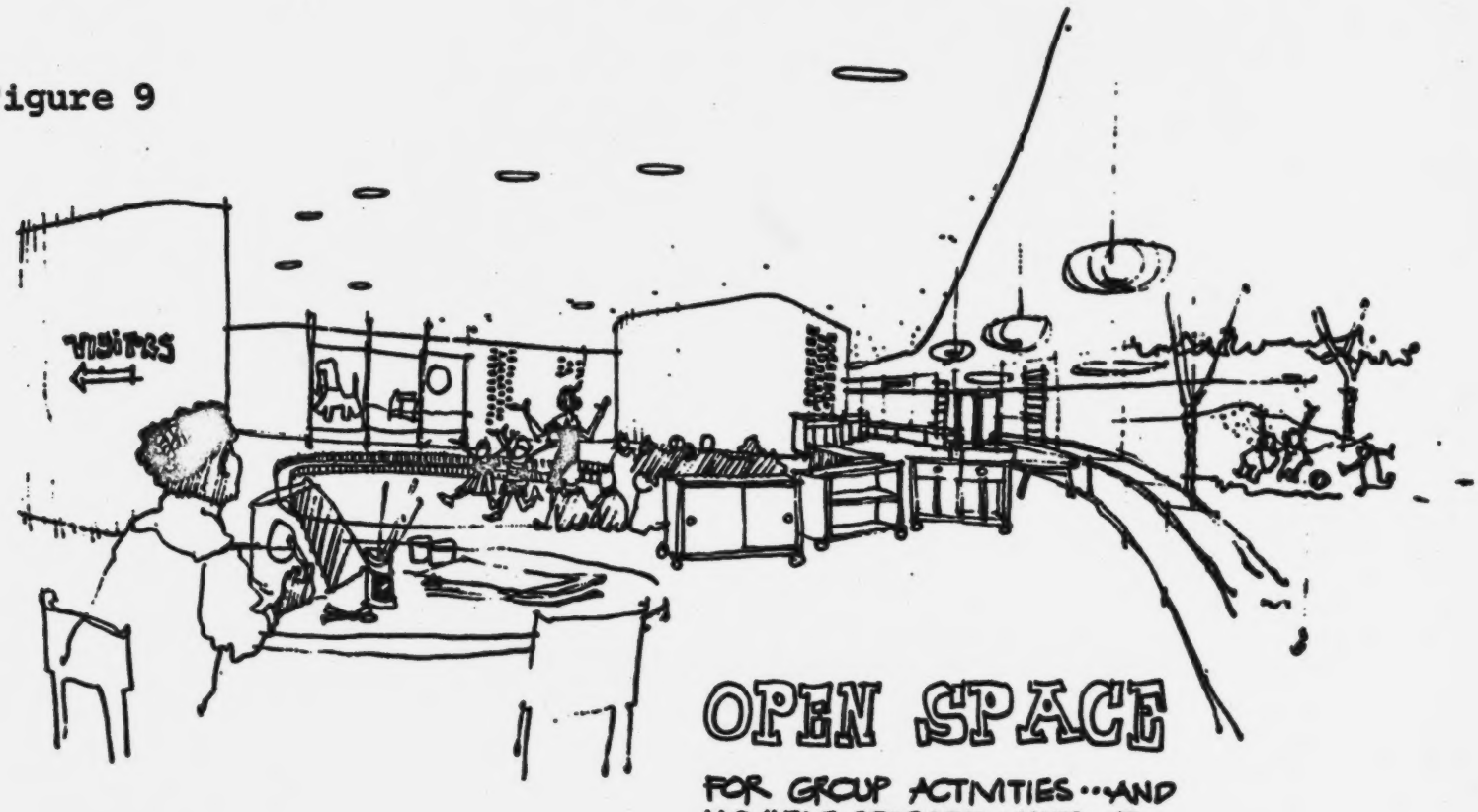


Figure 10

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